



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200  
Fax 613 632-5246

# Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Past Due Days	Total	Supplier Name
P0041828	McMaster-Carr Supply Co.,	1	1	2% 10 Net 30	59915K274	Rod End Bearing D4777-1				20	12/12/2018	20		S137347	Inactive	12/12/2018	\$ 19.05 / pcs	0	\$381.00	McMaster-Carr Supply Co.,
		2			C2-8HC-41	Button Head Hex Drive Screws Zinc Plated Alloy Steel, 1/4"-28, 3/4" long				25		25		S137354	Stock	12/12/2018	\$ 0.32 / Ea	0	\$7.91	McMaster-Carr Supply Co.,
		3			C2-8HC-43	Zinc-Plated Steel SAE Washer 1/4" Screw Size, 0.281" ID, 0.625" OD				220		200		S137359	Stock	12/12/2018	\$ 0.03 / Ea	0	\$5.26	McMaster-Carr Supply Co.,
		4			C2-8HC-45	Medium-Strength Steel Nylon-Inser Locknut Grade 5, Zinc-Plated, 1/4"-28 Thread Size				100		100		S137363	Stock	12/12/2018	\$ 0.06 / Ea	0	\$5.75	McMaster-Carr Supply Co.,
		5			1374N33	Multipurpose Neoprene Rubber Sheet 50A, Adhesive-Back, 12" x 24", 1/16" Thick				2		2		S137364	Stock	12/12/2018	\$ 15.60 / sf	0	\$31.20	McMaster-Carr Supply Co.,
		6			2044T47	Tube Ø1.09				20		20		S137333	Stock	12/12/2018	\$ 0.61 / ft	0	\$12.10	McMaster-Carr Supply Co.,
		7			2044T67	Cap Ø1.09 receive ea				100		100		S137367	Stock	12/12/2018	\$ 0.24 / Ea	0	\$23.54	McMaster-Carr Supply Co.,
		8			3896T31	Ferule 1/16 X 3/8" Aluminum				200		200		S137368	Stock	12/12/2018	\$ 0.13 / Ea	0	\$26.24	McMaster-Carr Supply Co.,
		9			51495K116	COUPLING 1/2" NCKL PLTD BRASS				10		10		S137369	Stock	12/12/2018	\$ 7.78 / Ea	0	\$77.80	McMaster-Carr Supply Co.,

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		10			8NR-74	Bolt 5*1/2						10		S137370	Stock	12/12/2018	\$ 2.31 / Ea	0		\$23.10	McMaster-Carr Supply Co.
		11			91257A481	Hex Head Screw 7/16"-20 x 6" LG.				15		15		S137371	Stock	12/12/2018	\$ 2.63 / Ea	0		\$39.45	McMaster-Carr Supply Co.
		12			93839A820	Thin Hex Nut 7/16"-20				50		50		S137372	Stock	12/12/2018	\$ 0.42 / Ea	0		\$21.14	McMaster-Carr Supply Co.
		13			94191A150	Hex Nut 1/4-28 UNF receive pcs				25		25		S137374	Stock	12/12/2018	\$ 0.30 / pcs	0		\$7.59	McMaster-Carr Supply Co.
		14			97135A235	Steel Nylon-Insert Locknut 3/8" x 29/64" High				20		20		S137378	Stock	12/12/2018	\$ 0.21 / Ea	0		\$4.18	McMaster-Carr Supply Co.
		15			98381A336	Steel Dowel Pin 1/4" Dia. x 2" Lg. Dowel Pin				25		25		S137380	Stock	12/12/2018	\$ 0.53 / Ea	0		\$13.30	McMaster-Carr Supply Co.
		16			MDELINR1.000W	Delrin Round Bar 1" color: White; MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL				5		5		S137336	Stock	12/12/2018	\$ 4.49 / ft	0		\$22.45	McMaster-Carr Supply Co.
		17			RBEL135M-2901-101-39	Poly-V Groove Belt				3		3		S137382	Stock	12/12/2018	\$ 10.69 / Ea	0		\$32.07	McMaster-Carr Supply Co.
												830								\$734.08	
													Total:	850							



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041828**

**Supplier:** MCM001-VU  
McMaster-Carr Supply Co,  
P.O. Box 7690  
Chicago, IL 60680-7690 USA  
Phone: 330 995 5500  
Fax: 330 995 9600

**PO No:** PO041828

**PO Date:** 11/23/18

**Due Date:** 11/28/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**E-MAILED**  
**NOV 23 2018**

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** 2% 10 Net 30

**Freight Terms:**

**Special Comments:**

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	186919	59915K274		Rod End Bearing D4777-1	Firmed -		11/28/18	20 pcs	0 pcs	20 pcs	\$19.05/pcs	\$381.00
Line Item Note as pewr dwg D4777 REV. A												
2		C2-8HC-41	91306A516 25/pk	Button Head Hex Drive Screws Zinc -Plated Alloy Steel, 1/4"-28, 3/4" long	Firmed -		11/28/18	25 Ea	0 Ea	25 Ea	\$0.3164/Ea	\$7.91
3		C2-8HC-43	90126A029 220/pk	Zinc-Plated Steel SAE Washer 1/4" Screw Size 0.281" ID, 0.625" OD	Firmed -		11/28/18	220 Ea	0 Ea	220 Ea	\$0.0263181/Ea	\$5.79
4		C2-8HC-45	95615A130 100/pk	Medium- Strength Steel Nylon- Inser Locknut Grade 5, Zinc-Plated, 1/4"-28 Thread Size	Firmed -		11/28/18	100 Ea	0 Ea	100 Ea	\$0.0575/Ea	\$5.75
5		1374N33	2 sf	Multipurpose Neoprene Rubber Sheet 50A, Adhesive- Back, 12" x 24", 1/16" Thick	Firmed -		11/28/18	2 sf	0 sf	2 sf	\$15.60/sf	\$31.20



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# **PURCHASE ORDER** **PO041828**

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
6		2044T47	4 ft long	Tube Ø1.09	Firmed -		11/28/18	20 ft	0 ft	20 ft	\$0.605/ft	\$12.10
Line Item Note 4 PCS OF 4 FT												
7		2044T67	50/pk	Cap Ø1.09 receive ea	Firmed -		11/28/18	100 Ea	0 Ea	100 Ea	\$0.2354/Ea	\$23.54
8		3896T31	50/pk	Ferule 1/16 X 3/8" - Aluminum	Firmed -		11/28/18	200 Ea	0 Ea	200 Ea	\$0.1312/Ea	\$26.24
9		51495K116	1/pk	COUPLING 1/2" NCKL PLTD BRASS	Firmed -		11/28/18	10 Ea	0 Ea	10 Ea	\$7.78/Ea	\$77.80
10		8NR-74	91257A755 1/pk	Bolt 5*1/2	Firmed -		11/28/18	10 Ea	0 Ea	10 Ea	\$2.31/Ea	\$23.10
11		91257A481	5/pk	Hex Head Screw 7/16"-20 x 6" LG.	Firmed -		11/28/18	15 Ea	0 Ea	15 Ea	\$2.63/Ea	\$39.45
12		93839A820	25/pk	Thin Hex Nut 7/16"-20	Firmed -		11/28/18	50 Ea	0 Ea	50 Ea	\$0.4228/Ea	\$21.14
13		94191A150	25/pk	Hex Nut 1/4- 28 UNF receive pcs	Firmed -		11/28/18	25 pcs	0 pcs	25 pcs	\$0.3036/pcs	\$7.59
14		97135A235	20/pk	Steel Nylon- Insert Locknut 3/8" x 29/64" High	Firmed -		11/28/18	20 Ea	0 Ea	20 Ea	\$0.209/Ea	\$4.18
15		98381A336	25/pk	Steel Dowel Pin 1/4" Dia. x 2" Lg. Dowel Pin	Firmed -		11/28/18	25 Ea	0 Ea	25 Ea	\$0.532/Ea	\$13.30
16		MDELIRNR1.000W	8572K61 5 ft	Delrin Round Bar 1" color: White : MATERIAL: DELIN II 150E OR ACETRON GP ACETAL	Firmed -		11/28/18	5 ft	0 ft	5 ft	\$4.49/ft	\$22.45
17		RBEL135M-2901- 101-39	9003K41 1/PK	Poly-V Groove Belt	Firmed -		11/28/18	3 Ea	0 Ea	3 Ea	\$10.69/Ea	\$32.07
<b>Grand Total:</b>											<b>\$734.61</b>	



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## **PURCHASE ORDER PO041828**

### **Order Notes**

#### **Procurement Quality Clauses**

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

*Plex 11/23/18 1:04 PM dart.lavoie.chantal*

## Chantal Lavoie

---

**From:** Daniel Paquette  
**Sent:** Thursday, November 22, 2018 10:28 AM  
**To:** Michelle GagnonDonovan; Chantal Lavoie; Sylvie Boucher  
**Subject:** Parts to enter into PLEX/Order Ref: OM-CAROUSEL  
**Attachments:** 91306A516 Button Head Hex Drive Screws.PNG; 95615A130 Medium-Strength Steel Nylon-Inser Locknut Grade 5.PNG

Michelle please enter into PLEX. Thanks.

Chantal please order one pack of 95615A130 and two packs of 91306A516 . Thanks.

Please have receiving give this to Sylvie or Alain in Small Fab. Thanks

**From:** Kevin Ketchum <kketchum@dartaero.com>  
**Sent:** Thursday, November 22, 2018 10:00 AM  
**To:** Daniel Paquette <dpaquette@dartaero.com>  
**Subject:** Re: C2-8HC hardware

C2-8HC-41	91306A516 MCM #	Button Head Hex Drive Screws Zinc -Plated
C2-8HC-43	90126A029 MCM #	Zinc-Plated Steel SAE Washer 1/4" Screw Si
C2-8HC-45	95615A130 MCM #	Medium-Strength Steel Nylon-Inser Locknut

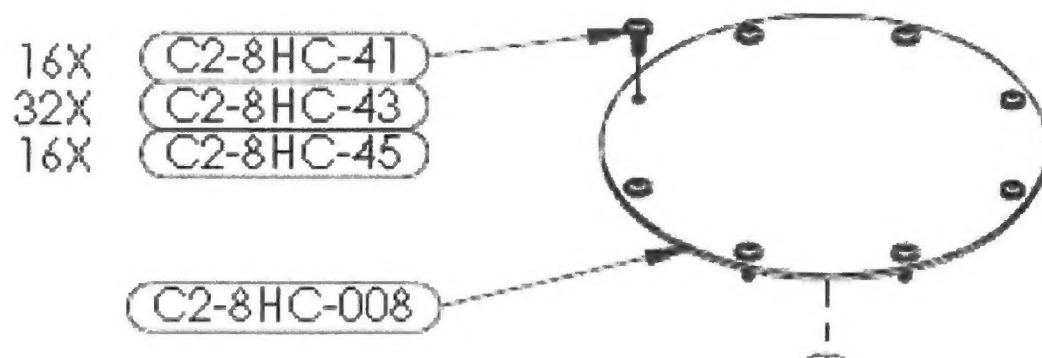
Here is the McMaster p/n linked to the hardware parts.

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**From:** Daniel Paquette  
**Sent:** November 22, 2018 9:14 AM  
**To:** Kevin Ketchum  
**Subject:** C2-8HC hardware

**SUBJECT**  
**OWNERS MANUAL CAROUSEL**

**10.2 ASSEMBLY FIGURE**





200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO041828**

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5175459-01**

Page 1 of 1

12/11/2018

Line	Product	Ordered	Shipped
6	2044T47 Round Cut-to-Length Shipping Tube, 1.09" ID, 48" Inside Length	5 Each	5 ✓
16	8572K61 White Delrin® Acetal Resin Rod, 1" Diameter, 5' Length	5 Feet	5 ✓



200 Aurora Industrial Pkwy  
Aurora OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO041828**

Page 1 of 1

12/11/2018

Order Placed By  
**Chantal Lavoie**

McMaster-Carr Number  
**5175459-02**

Line	Product	Ordered	Shipped
1	59915K274 Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand	20 Each	20 ✓
2	91306A516 Button Head Hex Drive Screws, Zinc-Plated Alloy Steel, 1/4"-28 Thread, 3/4" Long, Packs of 25	1 Pack	1 ✓
3	90126A029 Zinc-Plated Steel SAE Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD, Packs of 220	1 Pack	1 <i>only 200</i>
4	95615A130 Medium-Strength Steel Nylon-Insert Locknut, Grade 5, Zinc-Plated, 1/4"-28 Thread Size, Packs of 100	1 Pack	1 ✓
5	1374N33 Multipurpose Neoprene Rubber Sheet, Adhesive-Back, with Certificate, 12" x 24", 1/16" Thick, 50A Durometer	1 Each	1 ✓
7	2044T67 End Caps for 1.09" ID Round Cut-to-Length Shipping Tube, Packs of 50	2 Packs	2 ✓
8	3896T31 Wire Rope Compression Sleeve for 1/16" Rope Diameter - Not for Lifting, Packs of 50	4 Packs	4 ✓
9	51495K116 Nickel-Plated Brass Push-to-Connect Tube Fitting for Air, Straight Connector, for 1/2" Tube OD	10 Each	10 ✓
10	91257A755 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 1/2"-20 Thread Size, 5" Long, Partially Threaded, Packs of 1	10 Packs	10 ✓
11	91257A481 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 7/16"-20 Thread Size, 6" Long, Packs of 5	3 Packs	3 ✓
12	83839A820 Zinc Yellow-Chromate Plated Steel Thin Hex Nut, Grade 8, High-Strength, 7/16"-20 Thread Size, Packs of 25	2 Packs	2 ✓
13	94191A150 Mil. Spec. High-Strength Steel Hex Nut, Grade 8, 1/4"-28 Thread Size, MS-51968-3, Packs of 25	1 Pack	1 ✓
14	97135A235 High-Strength Steel Nylon-Insert Locknut, Grade 8, Zinc Yellow-Chromate Plated, 3/8"-24 Thread Size, Packs of 20	1 Pack	1 ✓
15	98381A336 Dowel Pin, Black-Oxide Alloy Steel, 1/4" Diameter, 2" Long, Packs of 25	1 Pack	1 ✓
17	9003K41 Ultra-Flexible Banded V-Belt, Trade Number 180J4, 18-5/16" Outer Circumference	3 Each	3 ✓

White Delrin® Acetal Resin Rod  
1" Diameter

White Delrin® Acetal Resin Rod, 1" Diameter | McMaster-Carr

In stock  
\$4.49 per ft.  
8572K61

Material	Delrin® Acetal Plastic
Cross Section Shape	Round
Construction	Solid
Texture	Smooth
Color	White
Clarity	Opaque
Diameter	1"
Diameter Tolerance	0" to +0.005"
Tolerance Rating	Oversized
Length	1 ft., 2 ft., 3 ft., 4 ft., 5 ft.
Hardness	Rockwell M90
Hardness Rating	Hard
For Use Outdoors	No
Temperature Range	-20° to 180° F
Impact Strength	1.00 ft.-lbs./in.
Impact Strength Rating	Good
Tensile Strength	9,000 psi
Tensile Strength Rating	Good
Specifications Met	ASTM D6100, NSF/ANSI Standard 51 for Food Contact, NSF/ANSI Standard 61 for Drinking Water
Density	0.051 lbs./cu. in.
Coefficient of Friction	0.20
Dielectric Strength	435 V/mil
Water Absorption	0.30%
Coefficient of Thermal Expansion	$8.5 \times 10^{-5}$ in./in./°F
RoHS	Compliant

1 2 3 4 5 6 7

PART NUMBER:	M-DELIN-R-D.DDD	X	
	DIA	COLOR	CODE

WHERE D.DDD = DIAMETER IN INCHES  
X = COLOR CODE, "W" = WHITE, OMITTED = BLACK  
EG. 1" BLACK ROUND BAR = M-DELIRIN-R.1.000  
2" WHITE ROUND BAR = M-DELIRIN-R2.000W

B	UPDATE DRAWING TO CURRENT STANDARDS, ADD MATERIALS CODES AND PARTS LIST TO DRAWING. ADD REVISION OF PREVIOUS AS. OPTION (REV. A)	SAD	BY	DATE
A	NEW ISSUE	SAD	DS	01.11.12
<p><b>DESIGN</b></p> <p><b>DART AEROSPACE LTD</b> HAWKSBURY, ONTARIO, CANADA</p> <p>DRAWN</p> <p>CHECKED</p> <p>MFG. APPR.</p> <p>APPROVED</p> <p>DATE</p>				
<p><b>REV. B</b></p> <p>SHEET 1 OF 1</p> <p>SCALE</p> <p>NITS</p> <p>DELIN ROUND BAR</p> <p>DELIN R</p> <p>TITLE</p> <p>CP</p> <p>17.10.19</p>				
<p>UPDATE DRAWING TO CURRENT STANDARDS, ADD MATERIALS CODES AND PARTS LIST TO DRAWING. ADD REVISION OF PREVIOUS AS. OPTION (REV. A)</p> <p>RIGHTS RESERVED BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.</p>				

APPROVED

REC-30  
2010 MAR 27  
FBI - BOSTON

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M Delrin R 1.0000  
 DATE: 18/12/12

PO / BATCH NO.: P0041828/5137336

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 5ft  
 QUANTITY INSPECTED: 5ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"  
 THICKNESS RECEIVED: 1.000"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	DELIN
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	P0041828
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> DATE: <u>18/12/12</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in